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# Photo quiz: A 58-year-old female with altered mental status

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## Photo Quiz: A 58-Year-Old Female with Altered Mental Status

Morgan A. Pence and Carey-Ann D. Burnham  
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## Photo Quiz

(For answer and discussion, see page 4121 in this issue [[doi:10.1128/JCM.00854-13](https://doi.org/10.1128/JCM.00854-13)].)

### A 58-Year-Old Female with Altered Mental Status

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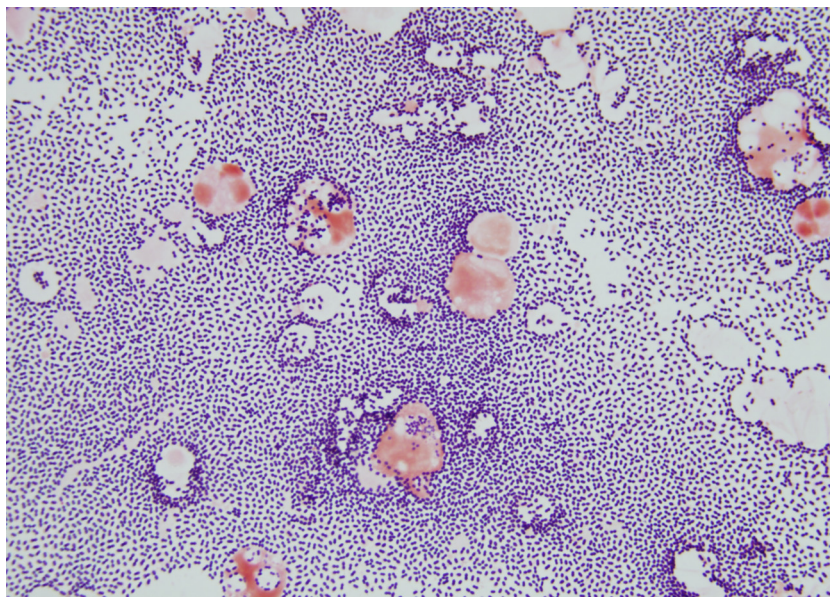


FIG 1 Cytospin Gram stain of cerebral spinal fluid (original magnification,  $\times 1,000$ ).

A 58-year-old woman with a history of hypertension and anemia presented to the emergency department with a 7-month history of progressive exhaustion, shortness of breath, palpitations, and dizziness, in addition to a 20-pound weight loss. She was diagnosed with Waldenström's macroglobulinemia and placed on dexamethasone. The patient was scheduled for chemotherapy and subsequently discharged a few days later. Three weeks after her initial presentation, she presented to the emergency department with altered mental status. Her husband reported that she had complained of a headache, nausea, and vomiting the day prior to presentation. A lumbar puncture was performed, and her cerebrospinal fluid (CSF) had an opening pressure of 38 cm H<sub>2</sub>O (normal range, 8 to 21 cm H<sub>2</sub>O); the patient was empirically started on vancomycin, ceftriaxone, acyclovir, and dexamethasone. Her CSF showed a total cell count of 422 cells/ $\mu$ l, with 169

nucleated cells/ $\mu$ l and a differential of 42% neutrophils, 6% lymphocytes, and 52% monocytes. CSF glucose and protein levels were <20 mg/dl (serum glucose level, 225 mg/dl) and 659 mg/dl, respectively. The CSF specimen was submitted to the microbiology laboratory for culture; the cytospin Gram stain of the specimen is shown in Fig. 1. Two sets of concomitant blood cultures were submitted, and the same pathogen was isolated from both cultures.

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